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I.

CONTAGIOUSNESS OF CHOLERA.

WE shall show, as briefly as possible, first, that the causes assigned by the anti-contagionists for cholera are totally inadequate to explain it ; and, secondly, that the specific objections urged against the contagious nature of cholera apply to diseases confessedly contagious, as smallpox. The following condensed summary from the Madras Report, and from M. de Jonnès' work, will prove that neither pestilential vapors, nor miasmus transported on the winds, nor excess of heat, nor humidity, nor excess or deficiency of electricity, nor, in short, any of those known physical agents which constitute the power of climate, will account for the propagation of cholera over the globe.

1. *Heat.*—The temperature of the countries under the tropics, in which it first appeared, is nearly equally intense in all years ; nevertheless the malady has not existed in such countries from time immemorial. European and native armies have been exposed to every variation of climate in India, without meeting with the disastrous malady which nearly destroyed the forces under the Marquis of Hastings. Cholera reached places which, from their great elevation, might be said

to be removed out of the sphere of a tropical climate. It attacked Catmandou, at the foot of the Himalaya mountains, situated eight thousand feet above the level of the sea. It overspread the villages on the tableland of Malwah, three thousand feet above the sea ; Kandi, in Ceylon, upwards of two thousand feet ; Erzeroum, in Armenia, seven thousand feet, or the elevation of the Hospice of Mount St. Gothard. In Russia, the malady spread as winter advanced, and attacked Moscow at the end of November, when the thermometer was 16° below zero, the rivers frozen, and the country covered with snow ; the number of deaths in that city being sixty out of one hundred and eighteen daily seized. Heat, however, appears to favor the propagation of cholera. It arose in the torrid zone. It is most deadly in the hot season. It ceases in India, Persia, and Syria, at the approach of winter, and recommences in spring. The conjecture of Moreau de Jonnès, that the spread of cholera, in spite of the severities of a Russian winter, was favored by the stoves, is not improbable. Clarke mentions in his *Travels*, that the artificial heat of the stoves in Russia often causes asphyxia, and adds, that numbers are buried alive in this state, owing to the ignorance of the Russian practitioners.

2. *Humidity*.—It is not the effect of humidity arising from the evaporation of marshes, rivers, lakes, or seas; although the fact that it first showed itself in the delta of the Ganges might favor that hypothesis. There appears to be no connexion between the malady and the hydro-metrical state of the atmosphere; for it has ravaged with equal intensity under the equator, where the quantity of rain is eighty inches, and under 60° of latitude, where it is one-fourth less, viz. eighteen inches. It has appeared in Asia, under the tropics, where the annual evaporation is seventy inches, and in Russia, where it is only twenty. It has attacked, with equal intensity, Muscat, situated in the neighborhood of immense deserts, and entirely deprived of water, except such as is procured from deep wells, and the towns in the alluvial delta of the Ganges. In short, it does not appear to depend on the neighborhood of lakes, rivers, and marshes, since it has attacked places two hundred leagues from the seashore, as Catmandou, and has overrun countries in which there are neither rivers, rivulets, marshes, stagnant waters, nor forests, as the peninsula of Arabia.

3. *Vapor*.—Cholera is not caused by a vapor, or an infected portion of the atmosphere, carried along with the winds. Certain winds, at certain seasons, blowing over the Pontine marshes, and carrying a deleterious principle with them, might have suggested this hypothesis. The Arabians and Syrians, seeing the healthy and strong suddenly fall down as if struck by the samiel, or desert wind, thought cholera depended on a pestilential wind also. If the propagation of the cholera was owing to the diffusion of some deleterious principle

by means of currents of air, that principle would be diffused with rapidity, and in the direction of the wind which transported it, and large masses of people would be almost simultaneously attacked, and the population of villages, towns, and districts, would suffer indiscriminately. But the history of the malady proves that it advances, step by step, slowly. It took a year to traverse the peninsula of India; three to pass the Persian Gulf; three to reach the Mediterranean and Caspian Seas.

If it depended for its translation from place to place on the wind, it would not proceed against the wind, and yet the cholera was proceeding in opposite directions at the same time. It departed from the delta of the Ganges, south-east to the Moluccas, and south-west to the Mauritius—to China in the east, and the shores of the Caspian on the west. Such an extended stratum of infected air must speedily have enveloped the whole globe; nevertheless when Aleppo, Antioch, and the other towns on the Mediterranean were attacked, the island of Cyprus, only thirty leagues off, escaped. The malady has proceeded in the face of the monsoons.

4. *Electricity*.—Some alteration in the excess or deficiency of this powerful physical agent has also been put forth, as the probable cause of the malady. If this hypothesis were well founded, some connexion would have been found between the malady and the laws which regulate the distribution of the electric fluid, according to seasons, latitudes and elevations. But cholera has appeared in July as well as December—in the equator and near the north pole—at the level of the ocean and on elevated mountains. The well known inequalities and ir-

regularities of the cholera in certain districts, towns, encampments, and even houses, appear not less unfavorable to this theory. It can scarcely be presumed that so general a poison of the atmosphere should ever, or at least so often, exert such *partiality* of influence.

The disease has raged under every sensible condition of the weather ; and, in fact, a great number of the attacks have taken place when the sky was clear and serene, and where every appearance indicated an undisturbed state of the electric fluid. If, finally, a deficiency of electricity be the true and sole proximate cause of cholera, it seems objectionable to limit its influence to epidemic attacks ; for each individual case, whether sporadic or epidemic, must be equally the effect of this proximate cause. Sporadic cases have, however, been too numerous and too uniform in their occurrence for some years past, to warrant the conclusion that they are connected with any particular state of the electricity of the atmosphere.

5. *Influence of the Atmosphere.*—

"By a reference," says Scott, "to the meteorical tables, it will be seen that the mean altitudes of the barometer and thermometer never differ, in a degree at all important, one year with another, from 1815 to 1821. In 1817 the disease did not appear. In 1818 it appeared in the most northern parts. In some places the weather was then wet ; in others dry. In some the usual periodical rains were prevailing. It progressed in all situations ; and it had not extended to the southernmost points till 1819, when the irregularities of the preceding seasons might be concluded to have lost their effects. After the seasons have been restored to their wonted regulations, and, more latterly, after a completely opposite state to that of 1818 has prevailed, to wit,

a season of unwonted drought, owing to the failure of the rains of the north-east monsoon, cholera has still unhappily continued to prevail ; sporadically in all parts, and, in the instances of many marching troops, epidemically, and with much severity and mortality. If the irregularity of the seasons in 1817 and 1818, therefore, have given rise to cholera, we apprehend it can only be in an indirect, and, to us, unknown manner ; and its continuance, after having once originated epidemically, appears to be unconnected in the main with any sensible state of the weather."

6. *Want of Cleanliness*—has been said to have given rise to cholera, from its being observed to be most fatal amongst the lower orders of people. There is no doubt that filth favors both the intensity and the propagation of the malady, but it cannot be looked on as originating it. The cholera began in a country where the climate renders frequent ablution a pleasure, while religion enjoins it as a duty ; and it has attacked the palaces of princes, and an English camp which may vie with these in cleanliness, equally with the filthiest habitations of the Tartar or the Polish Jew.

7. *Crowded Population.*—The Indian cities do not contain so dense a population as the European ones. The former cover larger spaces in proportion to the number of their inhabitants than the latter ; each family has a separate residence, and the number of gardens is equal to the houses. The malady has not spared thinly inhabited countries ; it has spread equally on the Caucasus where there are but eight individuals to the square league, and in Hindostan where there are one thousand two hundred. In India, Russia, and Persia, of cities under precisely the same circumstances of climate, laws, population

and customs, some have been attacked, while others have remained exempt. Damascus and Jerusalem escaped in 1823, while Antioch and Aleppo were ravaged. Sarepta continued uninfected, while the rest of the towns on the Wolga suffered.

8. *Food*.—It is scarcely necessary to notice this topic—different nations, living on various kinds of food, have been equally attacked: the rich, who know not want, and the poor, who know not plenty, are equally the victims of cholera.

9. *Sol-Lunar Influence*.—Scott has taken great pains to show, that Mr. Orton's speculations on this head are worthless. By a curious diagram which he has constructed, he contrives to arrange nearly eight thousand hospital cases of cholera, and one hundred and twenty epidemic attacks of that disease in different stations, so that each day in a lunar month has its mortality marked opposite to it. The bare inspection of the diagram shows that cholera is not affected by sol-lunar influence, either in individual cases, or in epidemic attacks.

While we are endeavoring to prove that none of the foregoing causes originate cholera, we by no means contend that they do not influence the march of the disease; on the contrary, the whole of our narrative abounds in facts which assert their power. We simply mean to affirm, that as the action of heat, electricity, climate, &c. is general, so it will never explain the facts which indicate the *partial* prevalence of the cholera—in a town to the exclusion of a suburb, in a suburb to the exclusion of a street,—in a street to the exclusion of a house.

Surely this ought to be sufficient. But no—the same objections which

were made in the time of Justinian, when a pestilence depopulated the earth, have been repeated and refuted, whenever mankind were the victims of a similar calamity. "The fellow-citizens of Procopius," says Gibbon, cap. 43, "were satisfied by short and partial experience, that the infection could not be gained by the closest conversation." "Mead proves (he adds in a note) that the plague was contagious, from Thucydides, Lucretius, Aristotle, Galen, and common experience, and he refutes the contrary opinion of the French physicians who visited Marseilles in the year 1720; yet these were the recent and enlightened spectators of a plague which, in a few months, swept away fifty thousand inhabitants of a city that, in the present hour of prosperity, contains no more than ninety thousand souls." Our *recent and enlightened* spectators are re-echoing, almost in the same terms used by their French brethren in 1720, the same absurdities, and exhibiting the same blindness—*e. g.*

"The habitudes of the disease (says Dr. Jamieson, the compiler of the Bengal Report) proved the cholera not to be contagious: it ran a regular course of increase, maturity, decay, and extinction. If the virus is capable of reproducing itself through the medium of effluvia, or secretions of individuals already affected, it must have gone on augmenting until it either had no longer subjects upon whom to exercise itself, or was counteracted by some means more powerful than itself. Such, at least, is the course commonly pursued by those great scourges—the smallpox and plague." *Bengal Report*, p. 127.

Such is not the course pursued by the great scourges—plague and smallpox, nor, indeed, by any other contagious epidemic whatever. It is manifest, that if these had gone

on augmenting in the way this author insists they should, mankind would have been swept from the earth long ago. On the contrary, it is impossible to open a book containing details of plague, smallpox, scarlet fever, or measles, without finding that there is a regular course of increase, maturity, and extinction traceable in each when epidemic. The plague of London, 1665, began in a family at Westminster, increased gradually, was apparently extinguished in winter, and revived the next spring. That of Marseilles at first broke out among a few porters, from whom the infection spread. The first seven chapters of Russell, which contain the history of different irruptions of the plague in different places, are full of facts in direct contradiction to Dr. Jamieson's assertion. Sydenham, who saw the plague of 1665, and who lived before inoculation was practised, describes smallpox as at one time rarely appearing, or not at all; then beginning to show itself at the approach of the vernal equinox, spreading more and more every day, becoming epidemic about autumn, abating on the coming of winter, and returning again in the spring. The measles of 1670, says the same physician, began very early, that is, at the beginning of January, and, increasing daily, came to their height at March; afterwards they gradually decreased, and were extinguished in the following July.

Not only is there a similarity in the general course of cholera and that of the known contagious diseases, as smallpox and plague, but there is a most striking parallelism extending even into their details. There is the same capriciousness exhibited in the selection of their victims; they spread in one part

of a town and not in another—commit the greatest ravages in one village, and neglect, or slightly visit, its immediate neighbor. "At some periods the smallpox and plague carry off hundreds; at others, children, whom we inoculated," says Dr. Odier, talking of smallpox, "have gone out every day, even after the eruption had broken out; they have been in the streets and public walks; they have communicated freely with other children susceptible of the infection, and not only the smallpox did not spread, but there did not occur, to my knowledge, any distinct instance of communication of the disease from one individual to another in the streets or promenades." Captain Graunt, in his observations on the Bills of Mortality, notices the great irregularities or "sudden skips which the plague hath made, leaping, in one week, from one hundred and eighteen to nine hundred and twenty-seven, and back again from nine hundred and ninety-three to two hundred and fifty-eight, and from thence again the very next week to eight hundred and fifty-two."—*Vide Birch's Bills of Mortality from 1657 to 1758.* Russell has accumulated a variety of facts which prove that the plague is less contagious at one time than another, and that commerce with infected places may subsist without ill consequence in the absence of that state of air, which, in our absolute ignorance of the exact laws of contagious disease, we call pestilential or epidemic constitution of the atmosphere.

After the instances of exemption from infection which are contained in Haygarth's narrative of a disease confessedly as deadly as the worst pestilences which have desolated the earth, it will scarcely be neces-

sary to notice the main argument urged in favor of the non-contagious nature of cholera, namely, that numbers who frequent the sick escape entirely. "The negative proof," says Dr. Macmichael, in his ingenious pamphlet, "however numerous, ought not to be put in the scale against the positive instances of contagion." p. 28. No, truly. What should we think of those who, having escaped the carnage of the battle of Waterloo, attributed their own immunity to the innocuousness of musquetry? We were in the midst of the fire, they might say, ran all the same risks as those who fell;—had bullets been dangerous, and the cause of death, why were we not killed? In every irruption of plague this species of reasoning has, however, been resorted to. The escape of M. Didier, and several medical men, during its prevalence in Marseilles, was looked on by them as proving that plague was not contagious; but a more curious step of this process of reasoning yet remains. "Had the cholera been contagious, (we are told,) those who were in the most intimate converse with the sick must have caught it; but as they did not, therefore the disease is owing to some pestiferous alteration of the air." We may fairly ask, by what miracle any escape from the action of a cause which is always in operation. Whether sleeping or waking, inclosed in houses, or exposed under the heavens, this poisonous atmosphere we know must be inhaled, by all persons within its range, at least twenty times in every minute. To reject the doctrine of contagion as difficult, in order to adopt the one just stated, appears to us very like straining at the gnat and swallowing the camel.

"When the India practitioners,"

says Dr. Macmichael, "saw a formidable disease spreading around them, they might have assumed, in the first instance, for greater security, that it was contagious. Had they instantly separated the sick from the healthy, and immediately endeavored to ascertain all the facts connected with the intercourse that had taken place between those who were first taken ill, and those who appeared to catch the disorder from them, they would probably have discovered the mode by which cholera was propagated, and perhaps we might not now have to dread the approach of that fatal pestilence to our own shores. If indeed, after all these prudent measures and anxious inquiries, it had turned out that no cure, no means of prevention which the mind of man could employ or suggest, were available, then indeed the desperate and desponding conclusion might at length have been adopted, that all human aid was vain." p. 31.

Not a single precautionary step seems to have been taken, because not one could be deemed necessary by the medical officers of Bengal, "who concurred without a dissentient voice, in declaring that cholera was not contagious." (Bengal Report.) Whether it was possible to have arrested the malady at first, as surely in the immense territories of British India as in the Isle de Bourbon, we will not hazard an opinion; but that the mortality might have been diminished, we have no hesitation in affirming; and what a frightful picture does that mortality exhibit! Up to May, 1831, we know of six hundred and fifty-six irruptions of cholera in Asia and Europe. Of course, many of those in remote and barbarous quarters of the globe are not included here. M. de Jonnès believes that this calculation is about one half less than the true number. In the fourteen years in which the cholera has

raged, one-sixth of the inhabitants of India have been carried off; one-third of those dwelling in the towns of Arabia; one-sixth of those of the same class in Persia; in Mesopotamia, one-fourth; in Armenia, a fifth; in Syria, a tenth; in Russia, a twentieth of the population of the infected provinces, up to May,—and there the malady has since made fresh progress, and carried off more victims. In India, as the disease has existed the whole of the fourteen years, M. de Jomès calculates the mortality at two and a half millions annually, which would give a total of about thirty-six millions; in order, however, to understate, he reduces the number to eighteen millions for Indostan, and taking the mortality for the rest of the world, from China to Warsaw, to amount to about thirty-six millions, arrives at the conclusion, that fifty millions of our race have perished in fourteen years of a disease which, in 1817, existed only in a few spots of the presidency of Bengal.

We have stated our conviction, that this dreadful mortality has been occasioned by a poison imbibed by the healthy and generated by the sick, that it has not been caused by some pernicious change in the atmosphere. Of the two hypotheses, if both were countenanced by an equal number of facts, still that of contagion should be preferred, not only on grounds of prudence, but on the score of humanity. What harm can come of taking up the contagious theory?—but if it were to be generally believed, in right earnest, that the ravages of the malady depend on the presence of a poisonous wind, whom could we expect to encounter the withering blasts of this worse than Simoon or Harmattan? There would be no safety nor refuge, and all the motives

which lead us to discharge the sacred duties of humanity, would languish and expire. Let us adhere to the safer, as well as more consolatory doctrine, until it is *proved to be false*. Let those who are enabled, take the advice of Franklin, and leave an infected spot “as soon as they can, go as far as they can, and stay away as long as they can.” By this means fewer victims are offered for the ravages of the malady. Let those who cannot move, adopt the most rigid rules of quarantine in their houses until the epidemic ceases, and they will not be less safe than the French consuls were in Syria or the sagacious Moravians of Sarepta. In all other contagious diseases the poisonous exhalations extend to very small distances from the sick, so that medicines may be administered and the ordinary attentions bestowed with less danger than is supposed. The history of contagious epidemics proves, that a large volume of atmosphere is never tainted, and that the notion of a town or village being enveloped in pestilential vapors is a vulgar error. Dr. Russell is of opinion, that the morbid exhalations of plague patients do not taint the atmosphere at any great distance, and are soon rendered innocuous. We know that the distance at which smallpox exhalations are dangerous is very circumscribed. The three great disinfectants are cold, time, and ventilation. The first appears to have invariably mitigated plague, smallpox, and cholera; the germs of these maladies decay or undergo decomposition in time; and ventilation dilutes morbid exhalations as surely as water does hemlock.

These general observations apply very strictly to cholera. While the numerous cases of death from in-

section prove the deadly nature of the morbid matter, the great number of exemptions under circumstances of close intimacy with the infected, show either that it speedily becomes innocuous, or that it requires a concurrence of many things to produce its effects.

We have endeavored to convey to the reader the impressions which the various documents on our table have left on ourselves ;—we have neither sought to exaggerate the horrors of the picture, nor to conceal them. The public mind ought to be roused to meet an impending danger with energy. The magnitude of the evil requires not only the vigilance of government, but of every individual. The ignorance, the folly, the cupidity, and the carelessness of mankind, are all arraigned against their safety, which perhaps not even the candid exhibition of the whole truth may secure. Should all prove vain, and the difficulties of enforcing quarantine regulations on our coasts be found insurmountable, the evil must be counteracted, not by national despondency or despair, but by prompt and decisive means.

II.

TOBACCO ENEMATA IN ILEUS.— CASE OF TRIPLETS.

Communicated for the Boston Medical and Surgical Journal.

By DENISON H. HUBBARD, M.D.

MR. EDITOR,—I transmit to you the following cases, which if you deem calculated to promote the object for which your Journal is published, you are at liberty to use.

The first case, "*Colica Ileus*," is related more especially to evince the utility of enemata of "*Nicotiana Tobacum*," as a last resort in

this distressing and troublesome complaint.

Mr. J. J. G. aged about 30, sanguine temperament, addicted to habits of intemperance, was seized, January 4th, with severe pain in epigastrium. Has chills alternated with hot flushes ; pulse full and about 85. He had made use for some time of large daily potations of spirits, and had one or two daily evacuations of a clayey aspect for nearly a week. A vein was immediately opened and about 14 oz. of blood abstracted ; a cathartic of calomel administered—fomentations applied to the bowels, and draughts to the feet.

5th. Has had no evacuation from the bowels ; pain continues severe ; pulse frequent ; tongue coated ; skin rather above the natural temperature. P. M.—6 grs. calomel, 1 of opium, prescribed every six hours. Epispastic to the epigastrium, enema communis between each pill.

6th. No better ; symptoms as yesterday, except has less pain. Continue the prescription.

7th. Has had three copious evacuations ; pain subsided ; pulse soft and natural. Ordered the bowels to be kept soluble by elix. proprietatis with aromatics.

The patient continued to convalesce until the 9th, when he overate, took cold, and soon a return of the symptoms ensued, with an excessive irritability of the stomach, which caused a continual effort to vomit. Is unable to retain food or medicines ; has considerable febrile excitement. Tr. and pill of opium both rejected. Enema communis, fomentations, hot blocks, &c. were used without effect. Common enemas being discharged by mouth, anodyne ones composed of laudanum 100 minims

in a gill of starch solution were ordered. Some truce was gained in symptoms for a short time; these however were soon dissipated, and vomiting, with severe pains, ensued. Chicken broth, crust coffee, emetics, mustard cataplasms, opiates, pepper tea, &c. were all used, without any lasting benefit. In the mean time several enemata of laudanum, containing from 100 to 200 gtt. each, were used, and as often rejected.

Warm baths, tobacco cataplasms, proving alike unsuccessful, I determined to try the effect of tobacco enemata, and accordingly one containing 3i. of tobacco in decoction was used, which soon eased the pain, checked the vomiting, and sunk the pulse almost to extinction. A cold clammy sweat came on, and the patient seemed rapidly sinking into the arms of death. Diffusible stimulants, with frictions of peppered brandy, were immediately resorted to, which gradually restored the patient, who by this means was rendered tolerably comfortable for two or three hours; when all the symptoms were again aroused with (if possible) redoubled fury. Other means failing, another tobacco enema was used, which had the effect of the first, except that it sank the pulse lower, and even rendered it imperceptible for some moments. The stimulating practice, crowded to the utmost extent, with external excitants, aroused the system again, after a considerable length of time. But by the use of external stimulants and anodynes, laudanum enemata, epispastics, &c. the patient was gradually restored to his usual health.

It may be proper to mention that this patient had for a long time been accustomed to the use of tobacco, which was not, it seems, any war-

rant against the prostrating influence of the article when applied to a portion of the membrane unaccustomed to its influence.

This article has often been used as an enema by a neighboring practitioner to destroy ascarides, without exhibiting any of its prostrating effects. It would, judging *a priori*, be concluded that strong vigorous men, especially those accustomed to its use, would be the best calculated to endure its influence with impunity. We know that, like several other articles of the *materia medica*, tobacco is very ununiform in its *modus operandi*, and probably on that account will not come for the present into general use. I have long been accustomed to view tobacco as unsafe, well remembering that its prostrating effects have in some cases of hernia been carried beyond restoration; but in the case related, it seemed to be the only article that offered much prospect of success. Whether the cases where tobacco has produced analogous effects to the abovementioned were inebriates, or whether they are more likely to experience depressing effects than those of temperate habits, I am unable to say. Children, it is well known, have borne with impunity 3ij. of this article by enema in form of decoction. I have ever been accustomed to begin with small doses, and gradually increase them if necessary; but in no case have I ever witnessed its depressing effects to so great an extent as in the one related.

I will also, Mr. Editor, relate for your consideration, and publication if thought proper, a case of *Triplets* which occurred in my practice March 31st, 1831.

Mrs. E. M. of healthy constitution, in her fourth labor, had pains regular and expulsive, which soon brought into the world a healthy boy. Pains continued almost without abatement, and while separating the child from the mother, gave exit to a second boy, which appeared strong and lively. Pains continued severe; and in ten minutes' time a third was born dead, and from appearance of child and cord might have been dead some days. Two placentas were thrown off in a few minutes. The whole labor was concluded in less than two hours from its accession. No untoward symptoms occurred during gestation, except what would naturally originate from a voluminous abdomen; in consequence of which she was obliged to keep her bed for the most part, as an erect posture would cause troublesome faintness, and excessive pain in back, loins and hips. But for the two last months of gestation these symptoms were greatly obviated by use of drawers (as recommended by Dr. Dewees) to support the abdomen; by means of which the patient has been able to transact her domestic concerns without much inconvenience until near the close of utero-gestation. The united weight of the three boys was 18 lbs. Two of them are now alive and healthy.

Glastenbury, Ct. Jan. 27, 1832.

III.

CASE OF FUNGUS CEREBRI.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—Please to insert the following case of Fungus Cerebri, if it is deemed worthy of a place in your useful Journal.

A few years ago I was called to a lad, who had fallen sixteen feet from a tree upon a very rough stone, thereby fracturing the right parietal bone, near the coronal suture, and nearer the sagittal suture than the squamous. After the bone was denuded and several pieces removed, it was discovered that a small sharp piece of bone had perforated both dura and pia mater, and also had penetrated more than an inch into the cerebrum. Through this small orifice, more than a table-spoonful of brain exuded on the stone, where he was found, and in the space of two days nearly double that quantity. About a week after the accident occurred, a fungus arose by small degrees to the size of a goose egg, and appeared obviously attached to the brain. This continued to discharge a thin, limpid, and sometimes greenish sanies, for some time; and at its greatest profusion, for four days in succession, more than three pints a day. For three weeks, his pulse was from one hundred and ten to one hundred and twenty in a minute, very feeble, tremulous and weak. His sight very much impaired; for weeks saw nothing distinctly; the eyes exhibiting a dull glossy appearance, with dilated pupils. Organ of hearing so much affected, as to know but little that was said to him. Frequent syncope, with great pain and prostration of strength. A fortnight elapsed before the wound exhibited any appearance of healing. Finally every person who saw him thought, for days in succession, that every day would be his last.

The treatment was as follows:—Wound being washed clean, with tepid milk and water, was dressed twice a day, during its greatest discharge, with common digestive ointment, composed of sixteen

parts lard, four resin, and four yellow wax. This ointment was continued, with few exceptions, through the whole process of healing the wound. Soon after the fungus appeared, hydrar. nit. rub. was applied, and the portion destroyed yesterday was cut off to-day. In this way I continued the dressings a few days, and found the discharge lessening, but the fungus increasing. The sulph. cupri was substituted for the hydrar. nit. rub. and instead of milk and water a very strong decoction of white oak bark; and after a few days, nut galls were used, and the desired effect obtained. The discharge and fungus were immediately restrained, and lessened daily. The weather being extremely warm, the wound had become very offensive, prior to the application of the sulph. cupri and white oak bark. Shortly after the last-named dressings had been applied, the whole wound assumed a more healthy appearance; the cadaverous stench was immediately removed; and instead of ill-conditioned sanies, a laudable and well-digested pus was seen. During two or three days after the accident, he was affected by a slight fever, to obviate which the antiphlogistic plan was pursued. After this slight fever had nearly left him, the bark, wine, cordials, and nourishment, were administered, as he could bear them. In seven weeks from the commencement, the wound entirely healed, and has remained so to the present time.

One circumstance is worthy of remark; two of the bones removed were of the size of a half dollar, besides several smaller pieces. Those vacant places are now almost entirely closed, and smooth, with very little depression. He has now arrived at manhood, and rather

above the common stature of men, and has enjoyed, with few exceptions, uninterrupted health; possessing a pleasant disposition, a sound judgment, and on a par with young men of his age for retentive faculties.

Comparing the above case with others of a like kind, which have been treated differently, and often terminated fatally, I am induced to believe that Fungus Cerebri can be cured with more safety, and less exhaustion to the patient from loss of blood, by following the desiccative plan, rather than excision at once by the knife.

Respectfully yours,

BENJAMIN W. HILDRETH.

Marlborough, Feb. 1, 1832.

MEDICAL JOURNAL.

BOSTON, FEBRUARY 7, 1832.

At the termination of the Fifth Volume of this Journal, we have to offer our regards to those of the Faculty who have sustained, by their subscription, the expenses of the work—and contributed, by their communications, to make its contents interesting and useful to the profession. A continuance of patronage in both these departments, will not be more lightly valued in future, or repaid less fully or cheerfully than in years past.

A few slight alterations, which are regarded as improvements, in the form and execution of the Journal will be noticed in the next number. Our sources of information are augmenting, and we are happy to see that the Original Department

is increasing; many more communications, from the Faculty in this country, have been published in the volume now closed than in any previous one, and the promise of a continuance and increase of such favors leads us to hope that the next will be still more replete with the experience of the American Faculty.

In the general plan of the work no important change is in contemplation, although pharmaceutical chemistry may occupy more space than it has done hitherto. The selections will continue to be made from articles possessing a practical value. The original essays, cases, &c. will probably as above mentioned be more numerous than heretofore. The editor will allow no subject of medical intelligence, that can interest the reader, to pass unnoticed; and the whole work will be conducted with perfect independence, and wholly without the influence of any set of men or any particular institution whatever.

The great and in fact the sole objects of this Journal have been (and will still continue to be) to afford its aid in the promotion of good fellowship and in the diffusion of medical intelligence among the Faculty. In the plain, undeviating pursuit of these objects, we have found it necessary to refuse admission to one or two communications containing personal attacks on distinguished members of the Faculty, and to one or two others containing similar allusions to Physicians, to whose names we were total strangers, but who, being members of the profession, were no less entitled to our respect. Regarding

the objects above mentioned as the most important we can pursue, in a work like this, and the course hitherto taken as the most dignified and proper, as well as most agreeable to our own inclinations, no change whatever will be made in the principle on which the admission or rejection of articles has been regulated. As we claim a freedom of opinion and of action for ourselves, we would cheerfully acknowledge a like claim for others; and if there are those who deem it wise that personalities should be printed and the profession divided into parties at open warfare, we prefer that pieces having this tendency should be presented to the Faculty in other pages than ours. But we cannot withhold the expression of our own conviction that the practitioners of the healing art have at all times, and especially at the present, far higher and nobler objects for their exertions.

The vast importance of the *earliest possible* information respecting the march and mode of arresting that appalling malady which already has its foot on the shores of Britain, and its eye on our happy land, gives a more than ordinary value to a *weekly* periodical like ours. On this ground alone, we are persuaded that, with all its faults, no practising physician should be without it. This subject is one of absorbing interest. The spread of the disease is slow but sure. A few weeks ago we heard of five cases in the small town of Sunderland. To-day we have accounts of more than 500 cases in that town within less than eight weeks. More than 100 have occur-

red at Newcastle, and several at Shields and at some of the coal mines. We hope much from the enterprise and intelligence of the Faculty in England; and we trust that before we are visited by this scourge, some mode will be found out in that country, if not of curing the disease, certainly of mitigating its violence and diminishing the amount of its fatality. With this expectation we shall keep an eye steadily on the progress of events abroad, and lose no time in placing in the possession of our readers the earliest notice of any important discovery respecting the treatment of the cholera. Whether the disease is contagious or not, is still a question with many. It admits, however, of no question that it may in some way or other be communicated by commercial intercourse, and that a wise and rigorous system of quarantine is of the utmost importance to the safety of our citizens. On this subject we refer the reader to the written opinions of Drs. Russell and Barry in another part of this number. We are happy to add that an investigation of this whole subject is proposed by the Counselors of the Massachusetts Medical Society, some details of whose proceedings we shall present the reader in the course of a few weeks.

TERM OF UTERO GESTATION IN THE INFERIOR ANIMALS.

THE limits of this term are more indefinite among quadrupeds, than in the human species, and its variations appear to depend neither on the age, constitution, or health of either

of the parents, on the race to which they belong, on the diet and regimen which they may have pursued, on the sex or size of the fœtus, the season of the year, or any other of the causes which from time to time have been assigned by different individuals. So far as the causes of this diversity are concerned, we are compelled still to believe that they have eluded the research of every investigator.

A member of the French Institute has made numerous observations on the degree of the variation of this period in several animals, and as he has kept a regular record for 40 years, of every case which has fallen under his own eye, or been reported to him by good authority, his results are entitled to confidence. His observations have been on 577 cows, 447 mares, 912 sheep, 161 rabbits, 25 sows, 8 buffaloes, 4 dogs, and 2 asses.

The cows, whose usual term is a few days longer than nine months, were found to vary in the period of gestation from 8 months, to 10 months and 21 days,—making a difference between the longest and shortest term, of 81 days. The buffaloes varied from 10 months to 12.

The ordinary period of mares being a few days longer than 11 months, some were found to delay their foaling till after the 14th month, the greatest variation between the periods of different individuals of this species being 132 days. Delays with this class of animals were much more frequent than with cows; and the same proved true of the

asses, who went from the 13th month to the 15th. Sows varied from the 3d month to the 5th.

The sheep varied in their period but 11 days ; the most frequent aberration being a prematurity to their natural term, which is 5 months.

The dogs, whose period is 2 months, varied but 4 days, and in the rabbits, whose natural term is one month, the variation was 8 days.

To our friends in the country, this information may be useful.

OPINION OF DRs. BARRY AND RUSSELL ON THE COMMUNICABILITY OF CHOLERA.

IN consequence of the indefinite ideas existing in the minds of many of the Faculty, respecting the opinion of Drs. Barry and Russell on cholera, we copy from the London Medical Gazette the following notice, to which their signatures are attached, and in which the whole matter of communicability appears to be summed up in few words. These two gentlemen, acting under the most solemn responsibilities, have investigated the subject with great apparent impartiality, and their opinion on this subject is unquestionably entitled to more weight than that of any other two medical men in any quarter of the globe. It appears to us that if the disease can, in any way, be communicated by emanations from the *contents* of vessels from infected ports, it ought to be regarded as communicable by merchandise as well as persons—and that the discharge of such “contents” at our wharves, would, in some measure at least, endanger the lives of

our citizens. But here is the document itself, from the Gazette.

Drs. Russell and Barry on Cholera.

The above-named gentlemen, when at Calais, made a memorandum of the conclusions at which they had arrived, on a mature consideration of all they had witnessed abroad relating to Cholera. A copy of this has appeared in various newspapers, but containing several very important mistakes ; the source from which we have received that which follows leaves no room to doubt its correctness.

“ After having meditated on the above facts and documents from the moment they came to our knowledge—after having weighed them with all the attention of which our minds are capable, and after having compared the opinions which each of us separately, and without discussion, had grounded upon them, we find our impressions as to the mode of origin and spread of the late epidemic at St. Petersburg and its neighborhood, so perfectly identical in all important particulars, that we now agree to and sign the following propositions, containing the heads of our unanimous opinions on this part of the business of our mission :—

“ 1. That the germs of the disease were brought to St. Petersburg by the boats and barks which arrived from the interior this year, previously to the 14th (26th) of June.

“ 2. That those germs were diffused and the disease propagated in two ways ; one which may be called personal, by the dispersion over the whole city immediately after their arrival, of several thousand passengers and boatmen, who had come from infected places, or had been exposed to infection on the passage or on board these vessels. The other, which may be termed atmospheric, by emanations from the barks, and their contents suspended in and carried by currents of air to

susceptible persons, independently of direct communication.

"3. That the germs of the same disease were carried to Cronstadt, and propagated there by boats and lighters which had been loaded directly from the barks already mentioned, by persons who had recent communication with these barks, or had been in their immediate neighborhood.

"4. That the disease was introduced into all the villages round St. Petersburg, in which we had been able to obtain authentic intelligence of its progress, by persons directly from the city, or from other infected places.

"5. That neither the near approach nor the immediate contact of an infected individual were indispensable to the infection of a healthy individual susceptible of the disease at the moment.

"6. That the epidemic of St. Petersburg did not possess the so absolute and indiscriminating communicable qualities attached to the plague and smallpox, and that the risk of infection incurred by the healthy who approached the sick, was in direct proportion to the want of cleanliness, ventilation, and space, around the latter.

"7. That in a generally infected atmosphere the additional danger of infection incurred by approaching one or more individuals laboring under this disease was not greater than would accrue from approaching one or more typhous patients under similar circumstances.

"8. That under favorable circumstances of body and mind, personal seclusion did afford protection against the disease, more particularly if that seclusion had been accompanied by shelter from currents of air passing through sources of infection.

"9. That those continued exempt from the disease who retired from and avoided communication with infected places; and those who resided to windward of, and those who were

protected from the currents of air passing through such places; that the next in point of immunity were those who, though living in the midst of general infection, avoided large accumulations of sick placed in confined atmospheres, the young, the vigorous, those who could afford to live well, yet lived temperately. In short, those who were placed under circumstances the most favorable to health, cheerfulness, and comfort of every kind.

"W. RUSSELL, M.D.

"D. BARRY, M.D."

LATE FROM EUROPE.

SINCE the foregoing pages went to press, we have received journals, &c. from England and France, but too late to avail of their contents this week. The cholera was advancing in England. The dates from Sunderland are to December 28th. The disease there began to subside. It had increased at Newcastle, there having been in that place 246 cases and 93 deaths. At Shields it was also spreading, and at Gateshead its ravages were almost unparalleled. At G. there are said to be a great number of intemperate persons, among whom chiefly the disease was most fatal, and its streets are also represented as exceedingly filthy; thus favoring the spread of the disease.—The following extract from an English paper will not be uninteresting.

"There appears to have been altogether thirteen cases at North Shields: eleven since the 10th ult. of which nine died and one recovered. One case, we are informed, has occurred which calls for particular attention, and seems to establish the fact that the disease is communicated by rags, &c. An old man who was in the

habit of going about the country with matches to sell, and to collect rags, returned with a bundle of rags from Sunderland. His wife observed a disagreeable smell to arise from them when they were spread out, and was soon after attacked with the cholera and died: the old man himself caught the complaint but recovered. A woman who was in the habit of nursing sick people, attended the old man in his illness, and observed the offensive smell of the rags. She was so far from being afraid of cholera that she wished to obtain the situation of nurse at the cholera hospital, yet she became ill of the disease, and is dead. Clothes, therefore, which have been about the cholera sick, should be carefully purified or destroyed.

The leading article in to-day's Journal is taken from the last Quarterly Review, republished by Lilly & Wait of this city. It is part of a very able and valuable review of the several works that have been published on the subject of cholera,—a review which we would recommend to the perusal of every physician.

We have now presented, in the course of this volume, pretty full views of the history, character, symptoms, and treatment of this disease. It will be unnecessary, therefore, to devote in future so much space as heretofore, to the discussion of this subject. When any efficient method of preventing or curing the disease shall be discovered, the details of such intelligence will not be withheld; but until then, we must be limited to regular and early, but brief notices of the progress of the disease, its fatality, &c. &c.

The case alluded to by Dr. H. we shall be happy to publish as soon as he will send the history of it.

NOTICES.

The Publishers of the Boston Medical and Surgical Journal will receive subscriptions for the American Edition of the London Medico-Chirurgical Review, and forward the numbers at the same price (five dollars per annum) at which they can be obtained of the publishers in New York.

The weekly numbers of the Medical Journal will hereafter be dated *Wednesday*, instead of *Tuesday* as heretofore.

Several names of subscribers are found on the books of the Journal who have not complied with the terms which have reference to payment within the year, and a few of those who are indebted for two or more years. Their early attention to this subject would oblige the present and former publishers of the Journal.

Wanted—at this office, No. 3, Vol. 5, of the Boston Medical and Surgical Journal, for which 12½ cents a copy will be given.

DIED—In this city, on Wednesday last, Mr. JOHN COTTON, Jr., eldest son of John Cotton, Esq. aged 32.

Whole number of deaths in Boston for the week ending January 27, 24. Males, 14—Females, 10.

Of inflammation on the lungs, 1—apoplexy, 1—consumption, 5—unknown, 2—liver complaint, 1—scarlet fever, 2—influenza, 2—dropsy on the brain, 1—infantile, 1—lung fever, 1—paralytic, 1—old age, 3—intemperance, 1—pleurisy, 1—bleeding at the lungs, 1.

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